July 15, 2003

Licensee: STP Nuclear Operating Company

Facility: South Texas Project, Unit 1

SUBJECT: SUMMARY OF HEADQUARTERS, REGION IV, AND STP NUCLEAR OPERATING COMPANY (STPNOC) TELEPHONE CONVERSATION ON MAY 20, 2003 REGARDING SOUTH TEXAS PROJECT, UNIT 1, BMI LEAKAGE ISSUE; SUPPLEMENTAL INSPECTIONS (TAC NO. MB8435)

On May 20, 2003, the NRC Headquarters and Region IV special inspection team staff held a telephone conference with STPNOC, the licensee for South Texas Project Unit 1. The conference call was a follow up of inspection of the licensee's activities following the discovery of an apparent leakage at the interface of reactor vessel bottom head and bottom mounted instrument (BMI) penetrations 1 and 46.

At this phone call the licensee went through a list of potential supplemental inspection activities that the licensee is considering. The licensee stated that it was evaluating the feasibility of performing a pressurized helium leakage test to visualize the leakage pathways that resulted in the April 12, 2003, discovery of leakage deposit indications under BMI penetrations 1 and 46. To look for evidence of any wastage, the licensee planned to perform a visual examination of the internal surface of the nozzles and the reactor pressure vessel nozzle bores' inside wall after the removal of the Alloy 600 tubes during the planned repairs. The licensee additionally discussed the use of ultrasonic inspections to interrogate the bottom of the reactor vessel for possible wastage. The licensee will also perform profilometry of penetration numbers 1 and 46 using eddy current probes, a 'straight rod' test to investigate the penetrations' alignment and roundness, and examination of material of Alloy 600 from tubes removed during the repair process. The licensee will also obtain and evaluate 'boat' samples from the tubes in penetration numbers 1 and 46. The licensee also discussed using eddy current techniques to interrogate the J-groove weld surface. The licensee further confirmed that it was not likely to pursue other options that were previously discussed, including molds of the inside surface of nozzles, and x-ray diffraction studies of a J-groove weld mockup.

The NRC staff stated that it concurred with the licensee's assessment that obtaining boat samples from the penetrations would yield extremely valuable information with regard to root cause determination. The NRC staff asked to be kept informed of the windows of opportunity, as they presented themselves, to pursue the above supplemental inspections; and as the licensee made final decisions and pursued a full array of planned tests.

/RA/

Mohan C. Thadani, Senior Project Manager, Section 1
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Office of Nuclear Reactor Regulation

Docket No. 50-498

South Texas, Unit 1

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Licensee: STP Nuclear Operating Company July 15, 2003

Facility: South Texas Project, Unit 1

SUBJECT: SUMMARY OF HEADQUARTERS, REGION IV, AND STP NUCLEAR OPERATING COMPANY (STPNOC) TELEPHONE CONVERSATION ON MAY 20, 2003 REGARDING SOUTH TEXAS PROJECT, UNIT 1, BMI LEAKAGE ISSUE; SUPPLEMENTAL INSPECTIONS (TAC NO. MB8435)

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Office of Nuclear Reactor Regulation

Docket No. 50-498
ACCESSION NO: ML031970005 NRC-001

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DATE	7/15/2003	7/15/2003	7/15/2003	7/15/2003

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DISTRIBUTION FOR SUMMARY OF MAY 20, 2003, MEETING WITH NRC HEADQUARTERS, NRC REGION IV, AND STPNOC RE: BOTTOM MOUNTED INSTRUMENTATION PENETRATION LEAKAGE INDICATIONS

Dated: July 15, 2003

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